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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,699

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Roberto Gianella

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10/21/2008

AKA CHAN LLP / CISCO  
900 LAFAYETTE STREET  
SUITE 710  
SANTA CLARA, CA 95050

EXAMINER

MUI, GARY

ART UNIT

PAPER NUMBER

2416

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,699	<b>Applicant(s)</b> GIANELLA ET AL.	
	<b>Examiner</b> GARY MUI	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-11,14-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-8,11 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 9,10,18,19 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 4 – 11, 14 – 19, and 21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 4 – 8, and 14 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansen (US 6,631,144 B1) in view of Cotton et al. (US 5,870,441; hereinafter “Cotton”).

For claim 1, Johansen teaches receiving a remotely transmitted signal formatted in accordance with the synchronous data transmission standard by the transponder (see column 2 lines 20 – 25; the multi-rate transponder receives an incoming data stream); recovering a clock signal from the remotely transmitted signal by the transponder (see column 2 lines 28 – 33, from the incoming data stream the clock signal is recovered); in a first mode, directing the recovered clock signal to a clock input of the transceiver (see column 2 lines 39 – 42; a clock signal is generated based on the received incoming data stream and will switch between the different data rates modes of the incoming data stream). Johansen fails to teach in a second mode, directing a locally generated clock to the clock input of the transceiver, and switching from the first mode to the second mode upon loss of the remotely transmitted signal or upon loss of recovered framing in the remotely transmitted signal. Cotton from the same field of endeavor teaches a switch element detects a failure in the transmission of the clock currently being used for synchronization, the switch element will immediately switchover to its own local clock for synchronization (see column 3 line 21 – 25; the switch element will use a first clock and then switch over to the second clock during a failure). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to have the switching between the modes as taught by Cotton into the transponder with the receiving/transmitting elements of Johansen. The motivation for doing this is to have a reliable clocking system.

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For claims 4 and 5, Johansen fails to teach the synchronous data transmission standard is a SONET standard or a G.709 standard, but does teach that the synchronous data transmission is SDH (see column 1 lines 6 – 20). However, it is well known in the art to use SONET or G.709 standard as the synchronous data transmission standard. Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use SONET or G.709 standard as the synchronous data transmission standard to increase the versatility of the system.

For claim 6, Johansen teaches the asynchronous data transmission standard is an Ethernet standard (see column 1 lines 6 – 20).

For claim 7, Johansen teaches transferring data recovered from the remotely transmitted signal to the transceiver for demultiplexing (see column 3 line 55 – column 4 line 6).

For claim 8, Johansen teaches using the transceiver to multiplex together multiple data streams to form a data signal for modulation onto an optical signal, the data signal being clocked by the recovered clock signal in the first mode and by the local clock in the second mode (see column 3 line 55 – column 4 line 6).

For claim 11, Johansen teaches a transponder that receives a remotely transmitted signal formatted in accordance with the synchronous data transmission standard and recovers a clock signal from the remotely transmitted signal (see column 2 lines 20 – 25; the multi-rate transponder receives an incoming data stream); in a first mode, directs the recovered clock signal to a clock input of the transceiver (see column 2 lines 39 – 42; a clock signal is generated based on the received incoming data stream and will switch between the different data rates modes of the incoming data stream). Johansen fails to teach in a second mode,

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directs output of the local clock source to the clock input on the transceiver, the multiplexer switching from the first mode to the second mode upon loss of the remotely transmitted signal and switching from the first mode to the second mode upon loss of recovered framing in the remotely transmitted signal. Cotton from the same field of endeavor teaches a switch element detects a failure in the transmission of the clock currently being used for synchronization, the switch element will immediately switchover to its own local clock for synchronization (see column 3 line 21 – 25; the switch element will use a first clock and then switch over to the second clock during a failure). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to have the switching between the modes as taught by Cotton into the transponder with the receiving/transmitting elements of Johansen. The motivation for doing this is to have a reliable clocking system.

For claims 14 and 15, Johansen fails to teach the synchronous data transmission standard is a SONET standard or a G.709 standard, but does teach that the synchronous data transmission is SDH (see column 1 lines 6 – 20). However, it is well known in the art to use SONET or G.709 standard as the synchronous data transmission standard. Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use SONET or G.709 standard as the synchronous data transmission standard to increase the versatility of the system.

For claim 16, Johansen teaches the asynchronous data transmission standard is an Ethernet standard (see column 1 lines 6 – 20).

For claim 17, Johansen teaches the data recovered from the remotely transmitted signal is transmitted to the transceiver for demultiplexing (see column 3 line 55 – column 4 line 6).

***Allowable Subject Matter***

6. Claims 9, 10, 11, 18, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aronson et al. (US 2007/0031153 A1) cited to show recoverable reference clock architecture for SONET/SDH and ethernet mixed bidirectional applications.

8. **Examiner's Note:** Examiner has cited particular paragraphs or columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Mui whose telephone number is (571) 270-1420. The examiner can normally be reached on Mon. - Thurs. 9 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would



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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/  
Supervisory Patent Examiner, Art Unit  
2616

/Gary Mui/  
Examiner, Art Unit 2416  
10/16/2008